Title: Skin conditions Confused With Child Abuse

Third QPEM Conference 11-13\textsuperscript{th} of January 2019

Name: Dr. Mohammad Qusad
I do not have any relevant financial relationship with commercial interest to disclose.
Learning Objectives

At the end of the presentation, the attendee will be able to:

1. Discriminate common skin conditions that could be confused with child abuse in ED
What is child abuse?

- Broadly defined as injury inflicted upon a child by a parent or caretaker.

- Approximately 700,000 to 1.25 million children are abused or neglected annually and nearly 3 million children are placed at risk for harm in the United States.

- Approximately 18 percent of cases involve physical abuse.
Mandatory reporting – non abusive skin conditions may be reported due to

- Ignorance
- Rare conditions
- Uncommon presentations of common conditions
Most common marks:

Marks from instruments

Belt buckle  Belt  Looped cord  Stick/whip
Fly swatter  Coat hanger  Board or spatula  Hand/knuckles
Bite  Sauce pan  Paddles  Hair brush  Spoon
Common skin and bleeding disorders that can potentially masquerade as child abuse:
Congenital dermal melanocytosis (Mongolian spot):

- It is the most frequently encountered pigmented lesion in newborns. There are marked ethnic differences in prevalence
  - 85 to 100 percent in Asian neonates
  - >60 percent in black neonates
  - 46 to 70 percent in Hispanic neonates
  - <10 percent in white neonates
Diaper dermatitis:

- also called diaper rash, napkin dermatitis, and nappy rash
- is the most common skin eruption in infants and toddlers.
- It typically occurs on convex skin surfaces that are in direct contact with the diaper,
- including the buttocks, lower abdomen, genitalia, and upper thighs
Vasculitis:

- Vasculitides are disorders defined by the presence of inflammation in a blood vessel wall (vasculitis).

- The inflammation may occur as a primary process or secondary to an underlying disease.
Von Willebrand disease:

- is the most common inherited bleeding disorder
- affecting up to 1 percent of the population as assessed by random laboratory screening
- characterized by mutations that lead to a decrease in the level or impairment in the action of von Willebrand factor (VWF)
Hemangiomas:

- Vascular lesions of infants and children are classified into two major types:
  - tumors and vascular malformations.
  - Infantile hemangiomas are the most common vascular tumors.
Photosensitivity:

- compounds found in certain fruits or vegetables (eg, limes, lemons, figs, parsnips, celery).

- The pattern of lesion corresponds to the contact
Acute hemorrhagic edema of infancy (AHEI)

- also known as Finkelstein or Seidlmayer disease
- is a leukocytoclastic vasculitis described in children
- between the ages of four months to two years.
- It is a self-limited disease that presents with fever, purpura, ecchymosis, and inflammatory edema of the limbs and resolves in one to three weeks.
Hemophilia typically refers to an inherited bleeding disorder caused by deficiency of coagulation factor VIII (hemophilia A), factor IX (hemophilia B), or factor XI (hemophilia C).
Hemophilia:
Moxibustion in Arabic tradition (Cauterization):

- therapeutic burning of pieces of moxa herb (mugwort or Artemisia vulgaris) or yarn on the skin.

- It is used in Southeast Asia, where it is considered a form of acupuncture.

- The lesions of moxibustion appear as a pattern of small discrete circular burns and may be confused with cigarette burns.
Cupping (Hojama):

- This technique is used in Middle Eastern, Asian, Latin American, and Eastern European cultures.

- Cupping presents as multiple, grouped circular ecchymoses, usually on the back.

- Central ecchymosis or petechiae result from the suction effect of the heated air as it cools and contracts.
Take home messages

- 90% of victims of physical abuse present with skin manifestations
- Evidence of psycho social problems frequently introduces a bias towards diagnosis of abuse
- Under diagnosis of abuse has catastrophic consequences for the child
- Over diagnosis -catastrophic consequences for parents/family
- A multidisciplinary team with Full detailed history, physical exam and investigation is mandatory
References:

• Frieden IJ, Eichenfield LF, Esterly NB, Geronemus R, Mallory SB
• Colonization of neonate skin by Malassezia species: relationship with neonatal cephalic pustulosis.
• Ayhan M, Sancak B, Karaduman A, Arikan S, Sahin S
• Patterns of bruising in preschool children with inherited bleeding disorders: a longitudinal study.


• Frieden IJ, Eichenfield LF, Esterly NB, Geronemus R, Mallory SB

• Colonization of neonate skin by Malassezia species: relationship with neonatal cephalic pustulosis.
• Ayhan M, Sancak B, Karaduman A, Arikan S, Sahin S

• Patterns of bruising in preschool children with inherited bleeding disorders: a longitudinal study.
• Collins PW, Hamilton M, Dunstan FD, Maguire S, Nuttall DE, Liesner R, Thomas AE, Hanley J, Chalmers E, Blanchette V, Kemp AM
• Evaluation for bleeding disorders in suspected child abuse.
• Anderst JD, Carpenter SL, Abshire TC, Section on Hematology/Oncology and Committee on Child Abuse and Neglect of the American Academy of Pediatrics
Questions
Thank you